

Title (en)

CROSSLINKED BIODEGRADABLE RESIN CONTINUOUS FOAMED SHEET AND METHOD FOR PRODUCTION THEREOF

Title (de)

KONTINUIERLICHE GESCHÄUMTE PLATTE AUS VERNETZTEM BIOLOGISCH ABBAUBAREM HARZ UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

FEUILLE EXPANSEE CONTINUE EN RESINE BIODEGRADABLE RETICULEE ET PROCEDE DE FABRICATION

Publication

EP 1449869 A4 20050119 (EN)

Application

EP 02783639 A 20021127

Priority

- JP 0212364 W 20021127
- JP 2001364399 A 20011129
- JP 2002007111 A 20020116

Abstract (en)

[origin: EP1449869A1] The foam sheet of the present invention is biodegradable, can be recycled, has good processability, is lightweight, exhibits excellent appearance, has practically satisfactory heat resistance and is more acceptable to the environment. <??>There is provided a crosslinked biodegradable resin continuous foam sheet comprising biodegradable resin, and has an expansion rate of about 1.5 to about 50 and a gel fraction of about 3% or more. <??>There is further provided a method for producing the foam sheet comprising the steps of: (1) preparing a sheet from a resin composition comprising a biodegradable resin, a thermal decomposable blowing agent and a crosslinking promoter; (2) irradiating the resulting sheet with an ionizing radiation to crosslink the resin composition; and (3) subjecting the crosslinked sheet to heat treatment to continuously prepare a crosslinked foam sheet. <??>Thus, the foam sheet of the present invention can be used in a wide range of practical applications such as, for example, interior materials for an automobile, thermal insulators such as a pipe covering, cushioning materials such as a tape core and the like.

IPC 1-7

C08J 9/04

IPC 8 full level

C08J 3/28 (2006.01); **C08J 9/06** (2006.01)

CPC (source: EP KR US)

C08J 3/24 (2013.01 - KR); **C08J 3/28** (2013.01 - EP US); **C08J 5/18** (2013.01 - KR); **C08J 9/04** (2013.01 - KR); **C08J 9/06** (2013.01 - EP US); **C08J 2201/024** (2013.01 - EP US); **C08J 2300/16** (2013.01 - EP US)

Citation (search report)

- [X] US 5314927 A 19940524 - KONDO HARUHIKO [JP], et al
- [X] EP 0984039 A1 20000308 - DAICEL CHEM [JP]
- [A] EP 0905175 A1 19990331 - TORAY INDUSTRIES [JP]
- [X] DATABASE WPI Section Ch Week 198342, Derwent World Patents Index; Class A18, AN 1983-791279, XP002307938
- [X] DATABASE WPI Section Ch Week 198326, Derwent World Patents Index; Class A32, AN 1983-62348K, XP002307939
- See also references of WO 03046060A1

Cited by

EP2133386A4; EP2087033A4; US2012053259A1; US8420746B2; EP3089867A4; US11590677B2; US9382416B2; US11590730B2; US10301775B2; US10501598B2; WO2006131190A1; WO2012009573A1; WO2017222891A1; WO2016051350A1; US10814590B2; US10384388B2; US11407872B2; US9821533B2; US10150273B2; US9878479B2; US10035327B2; US10137624B2; US7265160B2; US11007761B2; US11628657B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

EP 1449869 A1 20040825; EP 1449869 A4 20050119; AU 2002349540 A1 20030610; AU 2002349540 B2 20071101; CN 100344679 C 20071024; CN 1596279 A 20050316; JP 2009091588 A 20090430; JP 4311204 B2 20090812; JP WO2003046060 A1 20050407; KR 100923833 B1 20091027; KR 20040066148 A 20040723; KR 20090014382 A 20090210; US 2005032923 A1 20050210; US 7265160 B2 20070904; WO 03046060 A1 20030605

DOCDB simple family (application)

EP 02783639 A 20021127; AU 2002349540 A 20021127; CN 02823660 A 20021127; JP 0212364 W 20021127; JP 2003547503 A 20021127; JP 2008306027 A 20081201; KR 20047008301 A 20021127; KR 20087030385 A 20081212; US 49667004 A 20040525